| Notice of Allowability   | Application No.                              | Applicant(s)     |
|--|--|------------------|
|  | 10/762,589                                   | BLOMQVIST ET AL. |
|  | Examiner                                     | Art Unit         |
|  | Stephen M. D'Agosta                          | 2617             |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |  |                  |
| 1. This communication is responsive to the pre-appeal received 5-25-2007.  |  |                  |
| 2.  The allowed claim(s) is/are <u>9,11,12 and 14-19</u> .   |  |                  |
| <ul> <li>3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this national stage application from the</li> </ul>  |  |                  |
| International Bureau (PCT Rule 17.2(a)).   |  |                  |
| * Certified copies not received:   |  |                  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |  |                  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.   |  |                  |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  |  |                  |
| (a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |  |                  |
| 1)  hereto or 2)  to Paper No./Mail Date   |  |                  |
| (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date  |  |                  |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  |  |                  |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |  |                  |
|  |  |                  |
| Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material  | Paper No./Mail Dat<br>7. ☐ Examiner's Amendn | (PTO-413),<br>re |
|  |  |                  |

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### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments, see Pre-Appeal, filed 5-25-2007, with respect to the prior art of record have been fully considered and are persuasive. The rejection of claims 9, 11-12 and 14-19 has been withdrawn and these claims now stand **allowed**.

Claims 1-8, 10, 13 and 20 were previously cancelled.

## Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

1. The applicant argues:

"..Rankin specifically teaches a method NOT to continuously monitor the signals of beacon devices, in order to save battery power of the mobile device (paragraphs [0005]). The paragraph [0020] of Rankin, as cited by the Examiner, merely teaches various techniques of determining mobile device's position and comparing the position to a "map" of beacons to find out whether to scan for beacon messages. Beacon signals are scanned for only when the mobile device is near the known location for the beacon.

In other words, in Rankin, a location of a mobile device is determined first, and then it is decided whether to scan for the beacon signals or not. This is in contrary to claim 9, where a property of a network is monitored first and then it is determined whether to conduct a positioning of the device.

Therefore, Rankin still does not teach the above claim limitations that Rydbeck fails to teach, and Rankin explicitly teaches away from "monitoring at least one property of a wireless communication network."

The examiner agrees.

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# 2. The applicant argues:

"..The third reference, Hunzinger, discloses a system that allows a user of a wireless mobile terminal to set up actions such as reminders, alerts, etc. to be triggered based on the location or dynamics of the terminal. In Hunzinger, the position of the mobile terminal is monitored regardless of how remote the mobile device is to the stored location.

For example in Fig. 3, the mobile terminal is monitored within the Area A, in which a stored position 300 is located, as well as in Area B, which is all the area outside the Area A. The locations of the mobile terminal in the Area B, e.g. locations 304 and 308, are monitored. Whereas in the present invention, the positioning of the mobile device is only performed when the mobile device is inside a cell (like the Area A), in which a location based function is related (like the location 300 in Area A). If the mobile device is outside the cell (like in the Area B), the positioning of the device is not performed in order to reduce the power consumption.

Therefore, Hunzinger does not teach: wherein the at least one property comprises a signal strength of a base station of said wireless communication network, said signal strength is measured at intervals, and at least information on changes in the signal strength is utilized in determining whether to conduct the positioning, and wherein the device is in an area of a cell to which the location based function is connected is determined by a cell identifier, and information on the base station signal strength is used for determining whether to conduct the positioning only when the device is in the area of the cell identified by said cell identifier.

The examiner agrees.

## 3. The applicant argues

".. The newly added fourth reference, de Vertuil, discloses a system that allows for more efficient use of resources for providing location information in a wireless network where multiple sources of such information may be available. A first source of location information such as Cell ID information is used to monitor the location of a mobile unit. The first source may provide sufficient location information in many instances. If more accurate location information is required, a more accurate source of information such as TDOA or GPS may be invoked (Abstract).

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De Vertuil is cited to show that location/position finding can use many well-known techniques such as GPS, AOA, TDOA, and cell-id. However, even with the allegation that these location-finding technologies are well-known in the art, these is still no showing that the claimed feature "determining whether to conduct a positioning of the device based on at least one property of the wireless communication network ..... " is taught or suggested by de Vertuil.

De Vertuil only teaches determining which location-finding technology to use, not determining whether or not to conduct positioning. The present invention is different from any cited references in that the positioning of the device is conducted only when two conditions are met: (1) there is a change in the signal strength or the like; and (2) the device is within an area identified by a cell identifier, and the location based function is connected to the area.

The examiner agrees.

4. The applicant states that the prior art does not teach all the claimed limitations, the examiner is swayed:

"...Applicant respectfully submits that none of the references teaches conducting positioning of a device based on these two conditions.

Summarizing the above, none of the cited references teach or suggest all the limitations of the present invention as recited in claim 9. The combination of the cited references also fails to teach or suggest all the limitations of the present invention as recited in claim 9.

Accordingly, claim 9 is not obvious over Rydbeck in view of Rankin, Hunzinger and de Vertuil. Therefore, claim 9 is patentable.

The rejection of claim 9 under 35 USC 103(a) is improper and should be withdrawn. Other independent claims 12, 15, 17 and 18 are also patentable based on the same rationale applied to claim 9.

Applicant respectfully requests the rejections of these claims, and all dependent claims in the application, be withdrawn as well".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- 1. Brohoff US 6,108,533
- 2. Gustafsson US 6,351,647
- 3. Herz et al. US 6,571,279
- 4. Glorikian US 6,772,213
- 5. Gotou et al. US 6,789,102
- 6. Rayburn US 6,970,871
- 7. Fukui et al. US 7,050,816
- 8. Fitch et al. US 7,107,038
- 9. Hanson US 5,963,861
- 10. Johnson US 2002/0164999
- 11. Link II et al. US 6,993,326
- 12. Smith US 6,580,914
- 13. Ayoub et al. US 6,477,363
- 14. Fitch et al. US 6,424,840
- 15. Spain et al. US 6,944,465
- 16. Blumberg et al. US 6,496,776

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEVE M. D'AGOSTA PRIMARY EXAMINER

4-29-07